

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application No.:	10/780,270	§	
Filed:	February 17, 2004	§	Examiner: Farrokh, Hashem
Inventor:		§	Group/Art 2187
Michael S. Bender, et al.		§	Unit:
		§	Atty. Dkt. No: 5681-76100
		§	
		§	
Title:	System and Method for	§	
	Accessing Storage Devices	§	
	Attached to a Stateless	§	
	Client	§	
		§	
		§	
		§	

REPLY BRIEF

Mail Stop Appeal Brief - Patents

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This brief is in reply to the Examiner's Answer dated January 2, 2008. Appellants respectfully request that this Reply Brief be entered pursuant to 37 C.F.R. § 41.41 and considered by the Board of Patent Appeals and Interferences.

REPLY

Reply to Examiner's Arguments:

Claims 1-4, 8-11, and 15-18:

In regard to claim 1, as noted in Appellant's Appeal Brief, Billington fails to disclose **that a mass storage device locally coupled to a thin client is accessible by a user of the thin client via a server.** Appeal Brief at 10-11. **In the Examiner's Answer,** the Examiner cites column 13, lines 19-56 and 62-63, col. 14, lines 8-16, and FIG. 11 of Billington, and asserts:

It is understood by one having ordinary skill in the art that to run any of [the] peripheral devices, a specific program (e.g., device driver) is required. The program must be stored in the mass storage device by the processor (e.g., processor 14 in Fig. 11). In [the] system of Fig. 11 the user stores such programs via the processor 14 which [is] used as a server for the system.

Examiner's Answer at 10. Appellants traverse the Examiner's remarks for at least the following reasons.

First, as noted in the Appeal Brief, Billington fails to explicitly disclose any aspect of the specific manner in which mass storage device 80 coupled to thin client 12 is accessed by a user of thin client 12 relative to processor 14. The Examiner's assertions as to what "specific program . . . is required" and how this program "must be stored" are **speculative conclusions that are unsupported by the actual teachings of the evidence of record.** Moreover, as demonstrated below, these aspects do not follow inherently from the disclosure of Billington. In particular, there exists simply no support in the record, or inherently following from the art of record, that any sort of program must be stored to a mass storage device as a precondition for using **that mass storage device.**

Notwithstanding its lack of evidentiary support, the Examiner's assertion is self-contradictory. The Examiner asserts that a specific program is required in order to "run

any of [the] peripheral devices,” and thus, presumably, to access such devices. The Examiner further asserts that this program must be stored in the mass storage device by the processor, and that this is done by the user via the processor. But if the driver must be stored in the mass storage device—which is one of the peripheral devices locally coupled to the thin client—in order for the mass storage device to be used, then the user cannot possibly store such a driver to the mass storage device as asserted by the Examiner, since according to the Examiner’s contention, the driver is itself a prerequisite for accessing the mass storage device.

Further, as noted in Appellant’s Appeal Brief, Billington fails to disclose **a server configured to store data to a mass storage device via a thin client in response to a user’s interaction with an application executable on the server.** Appeal Brief at 11-12. **In the Examiner’s Answer**, the Examiner reiterates the previous assertion regarding the necessity of a device driver being stored by a processor, and asserts that “since there is no direct connection between the processor 14 and the mass storage device 80, the accessing of the storage device 80 by the processor 14 is only possible via the thin client 12.” Examiner’s Answer at 10.

Appellants traverse the Examiner’s assertions. As noted above, there is simply no support in the record for the Examiner’s assertion that a device driver must be stored to the mass storage device by Billington’s processor in the manner the Examiner contends. Moreover, there is absolutely no support in Billington for the contention that such a device driver, or any other data, is stored to a mass storage device via a thin client in response to a user’s interaction with an application executable on the server. Even if the Examiner were correct with respect to Billington’s disclosure of storing a device driver to a mass storage device, there is simply no suggestion in Billington as to what sort of activity might trigger such storing.

More specifically, Appellants note that claim 1 specifically recites that a server is configured to store data to a mass storage device locally coupled to a thin client in response to a user’s interaction, via that thin client, with an application executable on a

server. That is, data storage by the server at the thin client occurs in response to user interaction with the server via the thin client. Even if Billington were to disclose a server that stores data to a mass storage device locally coupled to a thin client, this would not amount to a disclosure of the specifically recited condition and manner in which such data transfer occurs according to the recitations of claim 1.

As noted in the Appeal Brief, **those features that are absent from Billington's disclosure do not follow inherently from Billington**. Appeal Brief at 12-14. To summarize Appellants' previous discussion: claim 1 requires that a user interact, via a stateless client, with an application executing on a server. Claim 1 further requires that the server be configured to store data to a mass storage device that is locally coupled to the stateless client in response to the user's interaction with the application that executes on the server. Thus, claim 1 requires a specifically recited causal relationship between the user, the stateless client, the server, and the mass storage device.

As noted above, Billington does not explicitly disclose or even hint at the recited relationship required by claim 1. Moreover, this relationship does not follow inherently from Billington. Appellants note that there are numerous conceivable ways in which data may be stored to a mass storage device coupled to a thin client, but Billington does not require any particular one of them. Taking just one such example, an embodiment in which Billington's thin client 12 interacts directly with mass storage device 80 (e.g., by use of local device drivers) without any intervention by processor 14 would be perfectly consistent with Billington's disclosure. But it would also contradict the requirements of claim 1, since claim 1 specifically requires that the data storage occur in response to user interaction with an application executing on a server.

In the Examiner's Answer, the Examiner asserts that Appellants' hypothetical is "contrary to the teaching of Billington." Examiner's Answer at 12. Specifically, the Examiner quotes from col. 14, lines 12-16, which states: "In an office environment, the system enables numerous thin clients to share the resources of one powerful PC, which acts as a server, or comprises a purpose built server, and share use of drives, one or more

printers, scanners, etc.” Appellants traverse the Examiner’s assertions. The quoted section of Billington states that several thin clients may share the resources of a server and “share use of drives.” But this does not in any way preclude the possibility that in Billington, several thin clients 12 may share resources of a server, such as the server’s drives, while interacting directly with local mass storage devices 80 without the direct involvement of the server. Thus, Appellants’ example stands as one of numerous ways Billington could operate in the absence of more specific guidance. Because Billington fails to explicitly disclose or suggest the features of claim 1, and could operate in a manner inconsistent with that of claim 1, Billington cannot be said to inherently disclose the features of claim 1.

Finally, **Billington fails to meet the standard of anticipation with respect to the independent claims.** Appeal Brief at 14-15. **In the Examiner’s Answer**, the Examiner simply reasserts that the features of the independent claims are found within Billington. However, as noted in the Appeal Brief and reiterated above, numerous aspects of the independent claims are neither explicitly nor implicitly disclosed by Billington, nor do they follow inherently from Billington. As such, Billington clearly fails to anticipate the independent claims.

Claims 5, 12, and 19:

Regarding claim 5, as noted in the Appeal Brief, **Billington further fails to disclose that the mass storage device is a solid-state mass storage device.** Appeal Brief at 15. In the Examiner’s Answer, the Examiner cites Billington, col. 12, lines 9-17, which describes various types of cradles for attaching a PDA or a mobile phone. Examiner’s Answer at 13. The Examiner further cites col. 8, line 47 and asserts that “[t]he PDA and/or mobile phone are considered thin client data communication devices.” *Id.* Appellants traverse the Examiner’s assertions. First, Appellants note that the cited portion of col. 8 does not support the Examiner’s contention that either a PDA or a mobile phone are thin client devices. Rather, at this portion, Billington discloses that a thin client device may be an instance of peripheral device 12, which is coupled to

processor 14. Billington at col. 7, line 37. Simply because Billington discloses thin client devices as peripherals and PDA/mobile phone cradles as peripherals does not entail that mobile phones and PDAs are thin client devices.

Further, Appellants note that claim 5 requires that the mass storage device that is locally coupled to a stateless client be a solid-state mass storage device. The various examples cited by the Examiner are of devices that may serve as embodiments of Billington's peripheral 12 that may in turn be coupled to a processor 14. However, Billington does not disclose coupling a solid-state mass storage device to a stateless client, and this simply does not follow from Billington's disclosure of a thin client or other peripheral that is coupled to a processor.

Claims 6, 13, and 20:

Regarding claim 6, as noted in the Appeal Brief, **the Examiner has not established an adequate reason to combine the references in the manner suggested.** Appeal Brief at 16. **In the Examiner's Answer**, the Examiner simply reiterates the rationale provided in the Final Office Action without addressing Appellants' argument.

Claims 7, 14, and 21:

Regarding claim 7, as noted in the Appeal Brief, **the cited references fail to disclose that the recited mass storage device comprises one or more unit interfaces, wherein each unit interface comprises one or more logical units (LUNs), and wherein each logical unit comprises one or more partitions.** Appeal Brief at 17. **In the Examiner's Answer**, the Examiner asserts that "Hochmuth teaches logic 59 provides one or more interfaces to logical units [of a storage array]" and that "[l]ogical units are parts or partitions of the storage device." Examiner's Answer at 14. Appellants traverse the Examiner's remarks. First, as noted in the Appeal Brief, Hochmuth's logic 59 is an element of Hochmuth's configuration server 54, which is distinct from a mass storage

device. By contrast, claim 7 specifically requires that a mass storage device include one or more unit interfaces.

Moreover, claim 7 requires a specifically recited hierarchical relationship between the recited unit interface(s) of the mass storage device, the recited LUN(s) and the recited partition(s). Hochmuth simply fails to disclose this set of relationships, and the Examiner's attempt to simply equate logical units with partitions essentially reads the recited distinction out of claim 7.

CONCLUSION

For at least the foregoing reasons, it is submitted that the Examiner's rejection of claims 1-21 is erroneous, and reversal of the Examiner's decision is respectfully requested.

The Commissioner is authorized to charge any fees that may be due to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5681-76100/RCK.

Respectfully submitted,

/Robert C. Kowert/

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